

What is claimed is:

1. A power injector apparatus comprising:
  - a transforming device for receiving AC power and transforming a level of  
5 said AC power to a predetermined level;
  - a rectifying device coupled with said transforming device for transforming  
said AC power into DC power;
  - a first interface coupled with said rectifying device for outputting said DC  
power;
  - 10 a second interface coupled with an Internet system for transmitting and  
receiving an Internet signal; and
  - a third interface coupled with said second interface and said rectifying  
device for outputting said DC power and transmitting and receiving said  
Internet signal.
- 15 2. The power injector apparatus according to claim 1, wherein said AC  
power is from an AC power source.
3. The power injector apparatus according to claim 1, wherein said first  
20 interface is a DC Jack.
4. The power injector apparatus according to claim 1, wherein said  
second and third interfaces are RJ-45 connectors.
- 25 5. The power injector apparatus according to claim 1, wherein said

Internet system is an Ethernet.

6. The power injector apparatus according to claim 1, wherein said power injector apparatus further comprises a filtering device coupled with said rectifying device for filtering noise of said DC power.

7. The power injector apparatus according to claim 1, wherein said power injector apparatus further comprises a fuse device coupled with said rectifying device for avoiding an abnormal current.

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8. The power injector apparatus according to claim 1, wherein said power injector apparatus further comprises a EMI filtering device coupled with said rectifying device.

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9. A power injector apparatus comprising:

a transforming device for receiving AC power and transforming a level of said AC power into a predetermined level;

a rectifying device coupled with said transforming device for transforming said AC power into DC power;

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a first interface coupled with said rectifying device for outputting said DC power;

a second interface coupled with an Internet system for transmitting and receiving an Internet signal;

a coupling device coupled with said second interface and said rectifying device to couple said DC power and said Internet signal; and

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a third interface coupled with said coupling device for outputting said coupled DC power and Internet signal.

10. The power injector apparatus according to claim 9, wherein said AC  
5 power is from an AC power source.

11. The power injector apparatus according to claim 9, wherein said first interface is a DC Jack.

10 12. The power injector apparatus according to claim 9, wherein said second and third interfaces are RJ-45 connectors.

13. The power injector apparatus according to claim 9, wherein said Internet system is an Ethernet.  
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14. The power injector apparatus according to claim 9, wherein said power injector apparatus further comprises a filtering device coupled with said rectifying device for filtering noise of said DC power.

20 15. The power injector apparatus according to claim 9, wherein said power injector apparatus further comprises a fuse device coupled with said rectifying device for avoiding an abnormal current.

16. The power injector apparatus according to claim 9, wherein said  
25 power injector apparatus further comprises a EMI filtering device coupled with

said rectifying device.